

would seem to be generally double-brooded here, the first brood appearing in April and May, and the second in July and August. The larvæ resulting from the second brood, as a rule, remain in their cocoons until the following spring, when they pupate some fortnight or so before the imagines emerge. During last October, however, numbers of the imagines of both sexes might be beaten from *Pinus sylvestris*, even up to the end of the month.

In August Mr. W. J. Lucas was fortunate enough to capture several male and female specimens of the rare dragonfly, *Sympetrum fonscolombii*.

That weird-looking "beastie," *Centrotus cornutus*, turned up in greater numbers than I have ever known before, *Cixius pilosus* being also very common. The *Typhlocybæ* were not nearly so abundant as in 1910. Undoubtedly, the insects that were more noticed than any others in 1911 were the common wasps, *Vespa vulgaris* and *V. germanica*, which literally swarmed. A worker was observed on the wing as late as November 19th, while a queen, which had flown into a neighbouring cottage, was brought to me on December 30th. This abundance seems rather remarkable, as 1910 was particularly noticeable for the scarcity of wasps here, as in other places.

Brockenhurst: January 30th, 1912.

NEW SPECIES OF NOCTUIDÆ FROM FORMOSA.

BY A. E. WILEMAN, F.E.S.

Agrotis arenosa, sp. n.

Fore wings pale ochreous brown mottled with darker ochreous; antemedial line dusky, irregular, and indistinct; postmedial line indicated by brown dots on the veins, preceded and followed by dusky marks between the veins; blackish dots between the veins on termen; a dark brown quadrate spot representing the reniform stigma; fringes pale, traversed by a darker line. Hind wings fuscous, glossy, fringes pale. Under side whitish, ochreous tinged, discal area of fore wings suffused with blackish; all the wings have a black discal dot and a dusky, curved, postmedial line.

Expanse, 36 millim.

Collection number, 945.

A male specimen from Arizan (7500 ft.), September 11th, 1906.
Near *A. rubicilia*, Moore.

Epilecta flavilinea, sp. n.

Fore wings dark brown, thickly powdered with grey on basal and costal areas; antemedial and postmedial lines yellow, edged on each side with black, the former outwardly oblique and the latter almost parallel with termen; space between postmedial and the ochreous

subterminal line rather darker brown; area beyond the subterminal line slightly tinged with reddish; black marks towards base of the wing, on the costa, and on each side of the orbicular; a short black dash from inner edge of subterminal line near costa. Hind wings yellow, termen bordered with blackish except towards tornus. Under surface of fore wings blackish, costa and terminal area yellow flecked with blackish; hind wings as above.

Expanse, ♂ 36 millim., ♀ 40 millim.

Collection number, 1685.

One example of each sex from Arizan (7500 ft.), September, 1908.

Allied to *E. accipiter*, Feld.

Hermonassa inconstans, sp. n.

♂. Fore wings ochreous brown, lightly freckled with brownish, outer third brown; subbasal line double, blackish, not continued to dorsum; antemedial line double, blackish, indented below costa; postmedial line double, blackish, wavy, curved beyond cell, indented below costa and above dorsum; subterminal line blackish, wavy; terminal dots black; reniform, orbicular, and claviform black, outlined in ochreous, reniform enclosing an ochreous line. Hind wings fuscous brown. Under side whitish suffused with fuscous, especially on fore wings; all the wings have blackish discal mark and postmedial line, the latter on hind wings indistinct towards dorsum.

Expanse, 28-32 millim.

Collection number, 946.

Two male specimens from Arizan (7500 ft.); one, the type, taken August 8th, 1908; the other captured September 21st, 1906. In the latter specimen the outer third of fore wings is concolorous with the rest of the wing, and the subterminal line is more distinct.

Allied to *H. incisa*, Moore, from Sikkim.

Hermonassa sinuosa, sp. n.

♂. Fore wings whitish, faintly suffused with pale brown, basal third greyish; basal line black, interrupted at median nervure, not continued to dorsum; antemedial line blackish, sinuous, followed by a black spot on the costa and a black sinus about middle; postmedial line blackish, wavy, excurved below costa, incurved above dorsum, preceded by a black spot on costa; subterminal line blackish, indistinct, originating in a large black spot on costa; reniform and orbicular paler than ground colour, outlined and centred with brownish. Hind wings fuscous, slightly paler towards base; a blackish discal dot and indications of a dusky postmedial line beyond. Fringes of the ground colour traversed by a pinkish brown line. Under side pale fuscous, brownish on costal area of hind wings; rather glossy; markings on fore wings indistinct; hind wings have a black discal mark and black postmedial line; the latter is sinuous and diffuse towards the dorsum.

♀. Similar to the male, but in addition to the other markings it has a blackish central line, which is bidentate towards costa.

Expanse, 30 millim.

Collection number, 1748.

One example of each sex from Rantaizan, May, 1906.

Allied to *Hermonassa* (*Graphiphora*) *pallidula*, Leech, from Western China.

Cirphis taiwana, sp. n.

♀. Fore wings pale ochreous brown, clouded and striated with reddish brown on the discal area; costa dotted with blackish; orbicular stigma brown, reniform blackish, both pale outlined, a whitish L-mark at lower end of reniform, and blackish diffuse spot beyond it; antemedial line blackish, with black dots upon it, outwardly oblique to just below vein two, thence inwardly oblique and indistinct to dorsum; postmedial line formed of black dots, which are connected by a wavy blackish line towards costa, almost parallel with termen, but the spot between veins one and two elongate placed inwards, and out of line with the others; fringes checkered with brown, preceded by black dots on termen. Hind wings dark fuscous, fringes pale ochreous brown; discoidal mark blackish. Under side pale ochreous brown, clouded with blackish on discal area of fore wings; all the wings have black discoidal spot and postmedial line, and black dots on termen.

Expanse, 42 millim.

Collection number, 146a.

Two female specimens from Rantaizan.

Near *C. geniosigma*, Hampson, from Ceylon; also *C. dharma*, Moore, from Sikkim.

Daseochata pulchra, sp. n.

♂. Fore wings green, longitudinally streaked with brown at the base and beyond middle of the wing; basal and antemedial lines black, both interrupted below costa, the latter expanded on dorsal area, and outwardly edged with white; postmedial line black, interrupted below costa and again by the lower brown streak, edged with white towards dorsum; subterminal line whitish sinuous, inwardly edged with blackish; costa dotted with black, a black mark between the stigmata, and two smaller ones below; fringes green checkered with darker, black dots at their base and tips. Hind wings pale fuscous, discoidal mark and postmedial line dusky; fringes pale greenish. Under side pale greenish; basal three-fourths of fore wings suffused with blackish; a blackish spot on middle of costa and a blackish clouded postmedial line on all the wings; a black dot in the cell, and a larger one at end of cell of hind wings.

Expanse, 32 millim.

Collection number, 924.

A male specimen from Arizan, September 25th, 1906.

Near *D. discibrunea*, Moore.

Perigea albigutta, sp. n.

♀. Fore wings dark chocolate-brown, costa dotted with white; antemedial and postmedial lines indicated by white points, the latter irregular, double; subterminal line represented by white dots, three above the middle and one near dorsum larger than the others; a series of white dots on termen; reniform and orbicular stigmata represented by clusters of white dots; fringes marked with white at ends of the veins. Hind wings fuscous, inclining to black on outer area. Under side whitish, freckled and suffused with fuscous; blackish discoidal mark and postmedial line on all the wings; outer fourth blackish, traversed by a pale subterminal line on fore wings.

Expanse, 39 millim.

Collection number, 942.

A female specimen from Kanshirei (1000 ft.), July 28th, 1906.
Near *P. stellata*, Moore.

BUTTERFLIES AT DIGNE.

BY GERARD H. GURNEY, F.E.S.

(Concluded from p. 97.)

Melitæa aurinia var. *provincialis*.—*M. phæbe*. Not very common; those I took all tended to var. *cinxioides*.—*M. didyma*.—*M. cinxia*. A fresh brood began to appear about July 20th.—*M. deione*. A very few worn ones were noted.—*M. parthenie*. I took a magnificent aberration of this species on July 18th; in Oberthür's 'Lépidoptérologie Comparée,' it is figured as ab. *rhoio*; on the upper side there are no black markings on the fore wings at all, except the outer margin and a suffused patch at the base. On the lower wings all orange colouring is absent, leaving the wings entirely brown: the under sides of the hind wings are pure white, except a greenish brown patch at the base containing a large black discoidal spot.—*M. athalia*.

Pyrameis cardui.—*P. atalanta*.—*Euvanessa antiopa*. Only one or two seen.—*Vanessa io*.—*Aglais urticae*.—*Eugonia polychloros*.—*Polygonia egea*. Scarce; not more than two or three seen.—*P. c-album*.

Limnitis camilla. Small males of a second brood were common.

Parage mæra.—*P. megæra*.—*P. egeria*.

Satyrus hermione. Very abundant, and in magnificent condition on July 18th; the females are very large.—*S. alcyone*. This species is perfectly distinct from *hermione* at Digne, being found at a higher level and always resting on the ground, never on trees; it is very constant in size, it also emerges later than *hermione*: on July 23rd, in places where *hermione* was beginning to get much worn, *alcyone* was quite fresh.—*S. circe*. Plentiful in orchards and hayfields, and quite fresh on July 18th; very large and fine, some of the females being enormous; many have a second spot on the fore wing.—*S. cordula*. Abundant everywhere, but beginning to go over by July 21st. The females show considerable variation in the colouring of the light band on the upper side of the hind wing; in some specimens it is very